Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Currently Amended) An entertainment apparatus using cards for obtaining inputs from a plurality of cards on each of which a visually human-identifiable design is printed and performing information processing in accordance with the inputs, comprising:

a ~~photographing means~~ photographic device for photographing said design of said card and fetching a photographic pixel data array;

a database including a plurality of entries individually corresponding to said plurality of cards, each of the entries including a pair of a card ID and a comparison data array;

a card ~~identification means~~ identifier for searching said database for a specific comparison data array based on said photographic pixel data array and obtaining a card ID pairing up with the specific comparison data array; and

an information ~~processing means~~ processor for performing said information processing with said card ID obtained by said card ~~identification means~~ identifier as an input,

wherein the photographic device includes an image sensor for photographing the design and outputting a photographic signal, a data array former for sampling the photographic signal and forming a data array, and a photographic pixel data array former for re-sampling the data array and forming the photographic pixel data array,

<u>wherein the data array formed by the data array former is constituted by a</u>

<u>plurality of pixel data, and</u>

<u>wherein the photographic pixel data array former includes an extractor that</u>

<u>sequentially extracts a predetermined number of pixel data of pixels adjacent to each</u>

<u>other in an image represented by the photographic signal from the plurality of pixel data</u>

<u>constituting the data array while the extracted pixel data are changed sequentially, and</u>

<u>a producer that produces a single photographic pixel data based upon the</u>

<u>predetermined number of pixel data extracted by the extractor at every time the</u>

<u>extractor extracts the predetermined number of pixel data</u>.

2.   (Currently Amended) An entertainment apparatus as set forth in claim 1,

wherein said ~~photographing means includes an image sensor for photographing said~~

~~design and outputting a photographic signal, a~~ data array ~~forming means for sampling~~

former <u>samples</u> said photographic signal at a first resolution ~~and forming a data array,~~

~~and a~~, <u>and said</u> photographic pixel data array ~~forming means for re-sampling~~ former <u>re-</u>

<u>samples</u> said data array at a second resolution which is lower than said first resolution

~~and forming said photographic pixel data array~~, and

said comparison data array includes comparison data corresponding to

said second resolution.

3.   (Currently Amended) An entertainment apparatus as set forth in claim 2,

wherein said card ~~identification means~~ <u>identifier</u> calculates a distance between said

photographic pixel data array and said comparison data array, and obtains the card ID

of the entry with the comparison data array at the shortest distance.

4.　(Original)　An entertainment apparatus as set forth in claim 3, wherein said distance is a sum total of absolute values of differentials between respective elements of said photographic pixel data array and corresponding elements of said comparison data array.

5.　(Original)　An entertainment apparatus as set forth in claim 3, wherein said distance is a sum total of squares of differentials between the respective elements of said photographic pixel data array and the corresponding elements of said comparison data array.

6.　(Currently Amended)　An entertainment apparatus as set forth in any one of claims 2 to 5, wherein said photographic pixel data array ~~forming means~~ former forms said photographic pixel data array with assignment of a predetermined weight to the predetermined number of pixel data ~~each element of said data array~~.

7.　(Currently Amended)　An entertainment apparatus as set forth in claim 2 , wherein said card ~~identification means~~ identifier includes a threshold value ~~determination means~~ determiner for determining whether or not said sum total of differentials is larger than a predetermined threshold value; and excludes any entry with said sum total of differentials larger than said predetermined threshold value from identification candidates.

8.   (Currently Amended) An entertainment apparatus as set forth in claim 7, wherein said card ~~identification means~~ identifier includes a number-of-candidates ~~determination means~~ determiner for determining a total number of candidates which are left as a result of determination by said threshold value ~~determination means~~ determiner, and does not obtain any card ID when it is determined by said number-of-candidates ~~determination means~~ determiner that the number of candidates is "0", and obtains the card ID of the identification candidate when it is determined that the number of candidates is "1".

9.   (Currently Amended) An entertainment apparatus as set forth in claim 8, taking said database as a first database, and further comprising a second database including one or more entries, each of the entries including a plurality of candidate card IDs and one determination card ID, wherein

said card ~~identification means~~ identifier includes a number-of-candidates ~~determination means~~ determiner for determining whether two or more said identification candidates are left or not, searches said second database for an entry in which there is a match between a combination of card IDs of the left candidates and a combination of said candidate card IDs in said second database when it is determined by said number-of-candidates ~~determination means~~ determiner that the number of candidates is "two or more" and, if there exists any matching entry, obtains the determination card ID of the entry.

10.   (Currently Amended) An entertainment apparatus as set forth in claim 1 ,

wherein said database includes card data corresponding to each entry, and

said information ~~processing means~~ processor includes a card data ~~display means~~

displayer for displaying at least the design based on the card data of the entry

corresponding to said card ID obtained by said card ~~identification means~~ identifier.

11.   (Previously Presented) An entertainment apparatus as set forth in claim 1 ,

further comprising a cartridge connector, wherein said cartridge connector is equipped

with a memory cartridge and the memory cartridge stores another database.

12.   (Currently Amended) An entertainment apparatus using cards, which

obtains inputs from a plurality of cards on each of which a visually human-identifiable

design is printed and performs information processing according to the inputs,

comprising:

a ~~photographing means~~ photographic device for photographing said design

of said card and fetching a photographic pixel data array;

a card ~~identification means~~ identifier for obtaining a data string

corresponding to the design from said photographic pixel data array; and

an information ~~processing means~~ processor for performing said information

processing with said data string obtained by said card ~~identification means~~ identifier as

an input,

wherein the photographic device includes an image sensor for

photographing the design and outputting a photographic signal, a data array former for

sampling the photographic signal and forming a data array, and a photographic pixel

data array former for re-sampling the data array and forming the photographic pixel data

array,

wherein the data array formed by the data array former is constituted by a

plurality of pixel data, and

wherein the photographic pixel data array former includes an extractor that

sequentially extracts a predetermined number of pixel data of pixels adjacent to each

other in an image represented by the photographic signal from the plurality of pixel data

constituting the data array while the extracted pixel data are changed sequentially, and

a producer that produces a single photographic pixel data based upon the

predetermined number of pixel data extracted by the extractor at every time the

extractor extracts the predetermined number of pixel data.

13.   (Currently Amended) An entertainment apparatus as set forth in claim 1 or

12, further comprising:

a card photographing part for setting said card in a predetermined position;

and

a light source for irradiating light to a surface to be photographed of the

card set in said card photographing part.

14.   (Currently Amended) An entertainment apparatus as set forth in claim 13,

further comprising a ~~reflection means~~ reflector for diffusely reflecting light from said light

source and letting the light enter said surface to be photographed.

15.   (Currently Amended) An entertainment apparatus as set forth in claim 13 or 14, further comprising:

a photographing part cover for covering said card photographing part, the cover having a position correction mark on a surface opposite to said photographic device photographing means; and

a photographic pixel data fetching area correction means corrector for correcting a fetching area of photographic pixel data based on said position correction mark, wherein

said photographing means photographic device photographs said position correction mark under a state where no card is set in said card photographing part.

16.   (Currently Amended) A method of identifying a card by photographing a plurality of cards on each of which a visually human-identifiable design is printed, including steps of:

(a) preparing a database including a plurality of entries individually corresponding to said plurality of cards, each of the entries including a pair of a card ID and a comparison data array;

(b) photographing said design by an image sensor and obtaining a photographic signal;

(c) sampling said photographic signal at a first resolution and forming to form a data array;

(d) re-sampling said data array ~~at a second resolution which is lower than said first resolution and forming~~ to form photographic pixel data array; and

(e) searching said database for a specific comparison data array based on said photographic pixel data array ~~and obtaining~~ to obtain the card ID pairing up with the specific comparison data array,

wherein the data array formed in said step (c) is constituted by a plurality of pixel data, and

wherein said step (d) includes (d1) sequentially extracting a predetermined number of pixel data of pixels adjacent to each other in an image represented by the photographic signal from the plurality of pixel data constituting the data array while the extracted pixel data are changed sequentially, and (d2) producing a single photographic pixel data based upon the predetermined number of pixel data extracted by the extractor at every time said step (d1) is executed.

17.   (Original) A card identifying method as set forth in claim 16, wherein, in the step (e), a distance between said photographic pixel data array and said comparison data array is calculated, and the card ID of the entry with the comparison data array at the shortest distance is obtained.

18.   (New) A card identifying method as set forth in claim 16, wherein in said step (c) the data array is formed by sampling said photographic signal at a first resolution, and in said step (d) the photographic pixel data array is formed by re-sampling the data array at a second resolution which is lower than the first resolution.

19.   (New) A card identifying method as set forth in claim 18, wherein, in the step (e), a distance between said photographic pixel data array and said comparison data array is calculated, and the card ID of the entry with the comparison data array at the shortest distance is obtained.